

Improving resource surveys for West Coast groundfish

Problem Statement

Current surveys of valuable West Coast groundfish are insufficient in number and geographic scope to provide adequate information about distribution, abundance, and age structure of groundfish populations. Additional surveys are needed to insure stock assessments more accurately reflect population trends.

Critical Factors

- The Northwest Fisheries Science Center (NWFSC) combines data from its trawl surveys with information derived from life-history studies and commercial landing statistics to calibrate models of groundfish population dynamics.
- These models are used to generate estimates of current abundance and fishing mortality levels, identify trends in abundance, and predict sustainable annual harvest levels for groundfish populations.
- The Pacific Fishery Management Council considers the NWFSC's potential harvest forecasts when it establishes annual harvest guidelines.
- To date, harvest guidelines have been based on incomplete information about stock abundance, distribution, and productivity.
- Additional resource information is needed to improve the quality of forecasts.
- Lack of a dedicated Fisheries Research Vessel (FRV) prevents NWFSC scientists from performing standardized, calibrated surveys.

Status of Research

During 1998, the NWFSC initiated a new, annual series of resource assessment surveys of slope species using commercial trawling vessels. Four chartered boats survey the area from Cape Flattery, Washington to Morro Bay, California. The surveys are designed to 1) characterize the relative abundance and distribution of the slope species complex, 2) test new methods and technologies for data acquisition and recording, and 3) verify the feasibility of using commercial trawlers to carry small scientific research parties.



Catch for groundfish slope survey

Future Considerations

The current surveys will improve the Center's ability to track trends in the abundance of key West Coast groundfish species. Access to a dedicated FRV in conjunction with these surveys will allow scientists to gather additional biological information and to increase survey capabilities to include juvenile sampling, studies of habitat/resource interaction, and studies of multi-species interactions within the marine ecosystem.

Key Players

Fishery Resource Analysis and Monitoring Division (FRAM), NWFSC

Alaska Fisheries Science Center, NMFS
Southwest Fisheries Science Center, NMFS
Pacific Fishery Management Council
Pacific States Marine Fisheries Commission
California Department of Fish and Game
Oregon Department of Fish and Wildlife
Washington Department of Fish and Wildlife
Oregon State University
University of Washington
Oregon Trawl Commission

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